

NUTTER, McCLENNEN & FISH

ONE INTERNATIONAL PLACE
BOSTON, MASSACHUSETTS 02110-2699

(617) 439-2000

TELEX 940790
TELECOPIER (617) 973-9748

October 5, 1987
2346-47



SDMS DocID

559189

COUNSEL
LONDON
TOKYO

HYANNIS
WASHINGTON
SAN FRANCISCO
PALO ALTO
AMSTERDAM

Ms. Barbara Newman
Project Officer
U.S. Environmental Protection Agency
Region 1
JFK Building
Boston, Massachusetts 02203

Re: Information Request to Wildwood Conservation
Corp., dated September 17, 1987

Dear Ms. Newman:

This will confirm our discussions with respect to the above-captioned information request. In light of the voluminous nature of the requested information and because Mr. Riley, the principal officer of Wildwood Conservation Corp. ("Wildwood") is away on vacation, I have requested an extension of the time within which Wildwood may respond to the Environmental Protection Agency's request until October 19. In the meantime, pursuant to our discussion, I have undertaken to provide information regarding Production Well No. 2 and its pumping history. Information concerning present usage of the well should be obtained from the Riley Leather Company, Inc., 228 Salem Street, Woburn, MA, the company which has run the tannery business since May 1985. The information contained in this letter and any additional responsive information will be incorporated into a formal response to be sent to EPA on October 19.

Production Well No. 2 ("PW2") was installed in 1958 and is located in a well house approximately three feet high located in the southwest corner of the Wildwood property. It is a gravel-packed well about 45 feet in depth. Please see the enclosed documents for additional information describing the well. Water from PW2 is used only in connection with the tannery's leather making process. There is little documentation concerning actual pump rates. Enclosed please find copies of documents, principally Metropolitan District Commission permit applications, which gives certain water volume figures, but these numbers reflect water pumped from both PW2 and PW1, located on the tannery property.

NUTTER, McCLENNEN & FISH

Ms. Barbara Newman
October 5, 1987
Page 2

For some time periods, although I am not certain when, PW2 was the only well used. According to Mr. Riley, the volume of water used depended on production levels. Over the years from the date of installation in 1958 to 1985, gallonage per day used in the process could vary in an approximate range of 250,000 to 400,000 g.p.d. PW2 was used for as much as eighteen hours a day, with principal use during a ten-hour period. PW2 was pumped for five days a week, sometimes six, and for approximately 50 weeks of the year. The pumping rate per minute varied but might be as high as 1000 g.p.m. on rare occasions. PW2 was not in use when the tannery was not operating, i.e., for holidays or vacation, or if it broke down.

Please call me if you have any questions with respect to this matter.

Very truly yours,


Mary K. Ryan

MKR:jmh
Enclosures

COPY

D. L. MAHER CO.

August 27, 1968

J. J. Riley Co.
Salem Street
Woburn, Massachusetts 01801

Att: Mr. John J. Riley Jr.

Re: Wells No. 1 and 2

Gentlemen:

At your request our firm conducted performance tests on your existing gravel packed wells No. 1 and 2 with the following results.

Well No. 1. (Attached Pump Test Log)

This well was test pumped at a rate of 305 gallons per minute to waste with a pumping level of 26', or an actual drawdown of 13'±. At this rate it was determined that the well is capable of delivering approximately 25 GPM per foot of drawdown.

Well No. 1 is approximately 38' in depth, equipped with 12' of 24" screen (top set at 26'). Please note that the pumping level during our test was at the top of the screen.

On the original pumping test of the newly constructed well in April of 1945, the static water table was approximately 3' below the original ground level. The test was conducted at the rate of 410 GPM with an actual drawdown of 15', or a specific yield of 26 GPM per foot of drawdown.

The specific yield of the original test and the one recently performed are basically identical, with the exception that the static water level is approximately 10' lower now. This can be accounted

000001

COPY

D. L. MAHER CO.

J. J. Riley Co.

-2-

Aug. 27, 1968

for by the fact that your No. 2 well is having an effect on the ground water table, and also the City has installed wells in the same general area and these, too, are affecting the water table.

In order to maintain the capacity of this No. 1 well, we recommend that the pumping level not exceed a depth of 25', or 1' above the top of the screen. Using a 25' pumping level, you should be able to realize a maximum capacity of approximately 275 GPM, provided the ground water table is not further affected by lack of precipitation and/or over pumping.

Well No. 2. (Attached Pump Test Log.)

The information obtained during this test was limited due to the fact that we could not measure the capacity, but could only obtain pumping levels.

This well is approximately 49'6" in depth, equipped with 15' of 24" screen (top set at 34'6").

Our first reading (14') was taken at 7:35 a.m. The pump was running at this time, but we presume that there was little or no demand on the system, so we are using this 14' figure as the static water level. During our tests we had a maximum pumping level of 30'6" below the head of the pump, or approximately 1' above the top of the well screen. The actual drawdown, considering that 14' is the correct static, was 16'6". Since we do not know the pumping rate at the time of the water level readings, we cannot establish whether the well has fallen off in capacity or not, but do know that the static water table in this site is also being affected.

If the 14' measurement is the correct static water level, the ground water table at this site has been lowered approximately 15'±.

In order to perform a true performance test on the well, it would be necessary to have the well shut down for a period of time, perhaps over a week end, so that we could get a true static water level. At this time we would install a temporary blow-off on the pump head and conduct a pump test measuring drawdown, capacity and pressures on the pump, while pumping to waste and not to the system.

000002

COPY

D. L. MAHER CO.

✓

J. J. Riley Co.

-3-

Aug. 27, 1960

We trust that we have covered everything, but should you desire any additional data please feel free to call.

Yours truly

D. L. MAHER CO.

Edward J. Maher
Vice President

EJM:ef
Encs.

000003

✓

Riley Pump Jan 31, 1958

as per Mr. Muter

Submersible 220V

70[#] DISCHARGE - 161 ft

Suction - 20 ft

friction - 10 ft

191 ft T.D. H

70[#]
With 20[#] diff. in elevation
50[#] at Factory

$$\frac{700 \text{ G.P.M.} \times 190' \text{ T.D.H.}}{4000 \times 1.8} = 41.6 \text{ H.P. (50 HP)}$$

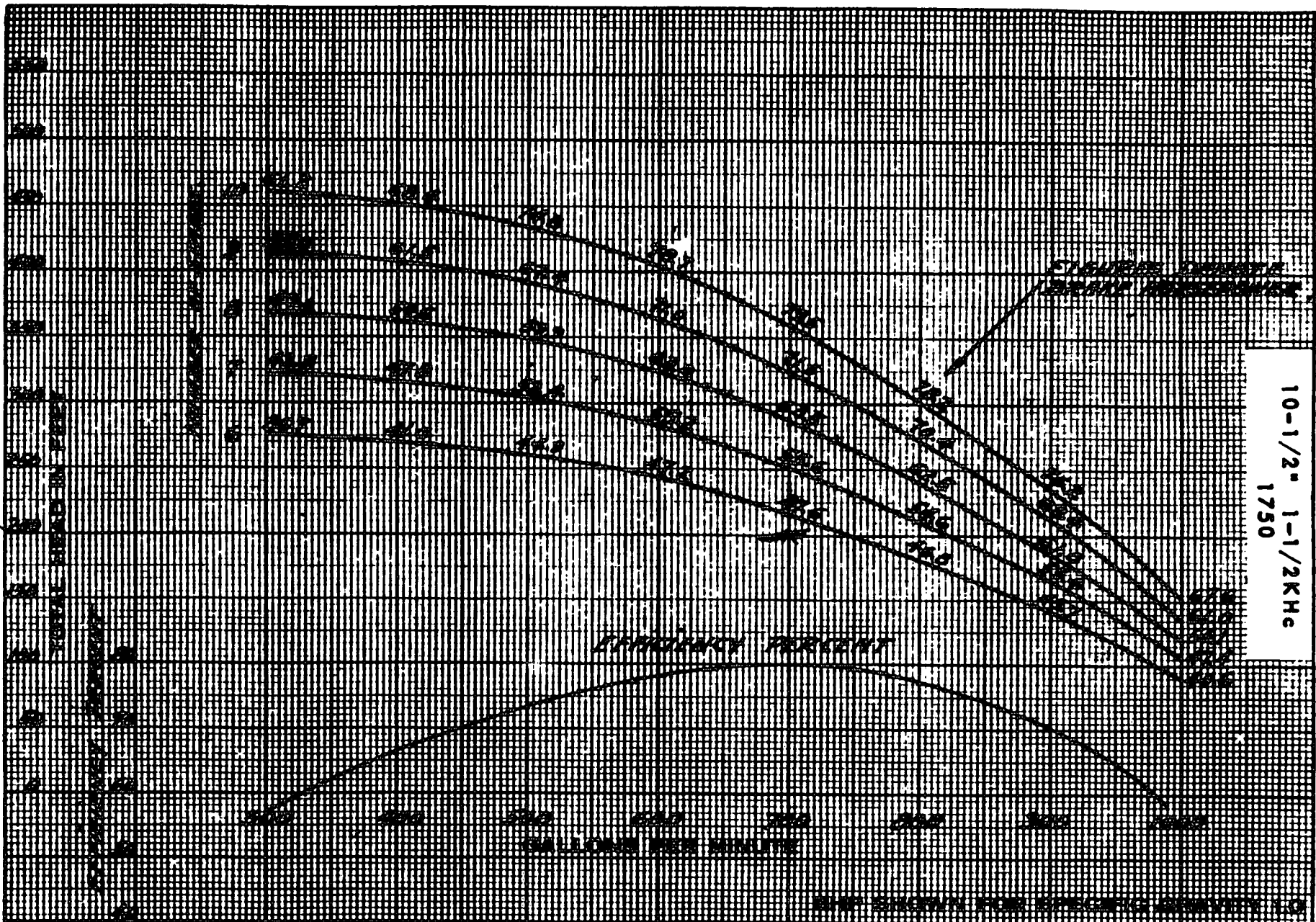
this job somewhat similar to Hartneth which
was based on 700 G.P.M. at 200' T.D.H.
Hartneth was 10 1/2 KHC 1 stage
KHC 4 stage
5 stage 50 HP

210-42A JULY 52

BYRON JACKSON CO.
DEEPWELL TORBINE PUMPS

SUPersedes ALL
PREVIOUS ISSUES

10-1/2" 1-1/2KHc
1750



<p>PUMP SIZE AND TYPE</p> <p>10-1/2" 1-1/2KHc DEEPWELL</p>	<p>RPM</p> <p>1750</p>	<p>EYE AREA- 10.2 SQ. IN.</p>	<p>DRAWN BY J.G.</p> <p>DATE 3-52</p> <p>SUPersedes</p> <p>DATE</p>	<p>BYRON JACKSON RATING</p> <p>K-1764-A</p>
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PR

QUANTITY 1
PRICE 1872

000005

✓

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A.D. COOK-INCORPORATED

LAWRENCEBURG INDIANA

ENGINEERING DEPARTMENT

PATTERN TS

18" - DEEP WELL TURBINE PUMP

CAPACITY - L-M

R.P.M. - 1760

IMPELLER P.C. NO. - 12 TR-300

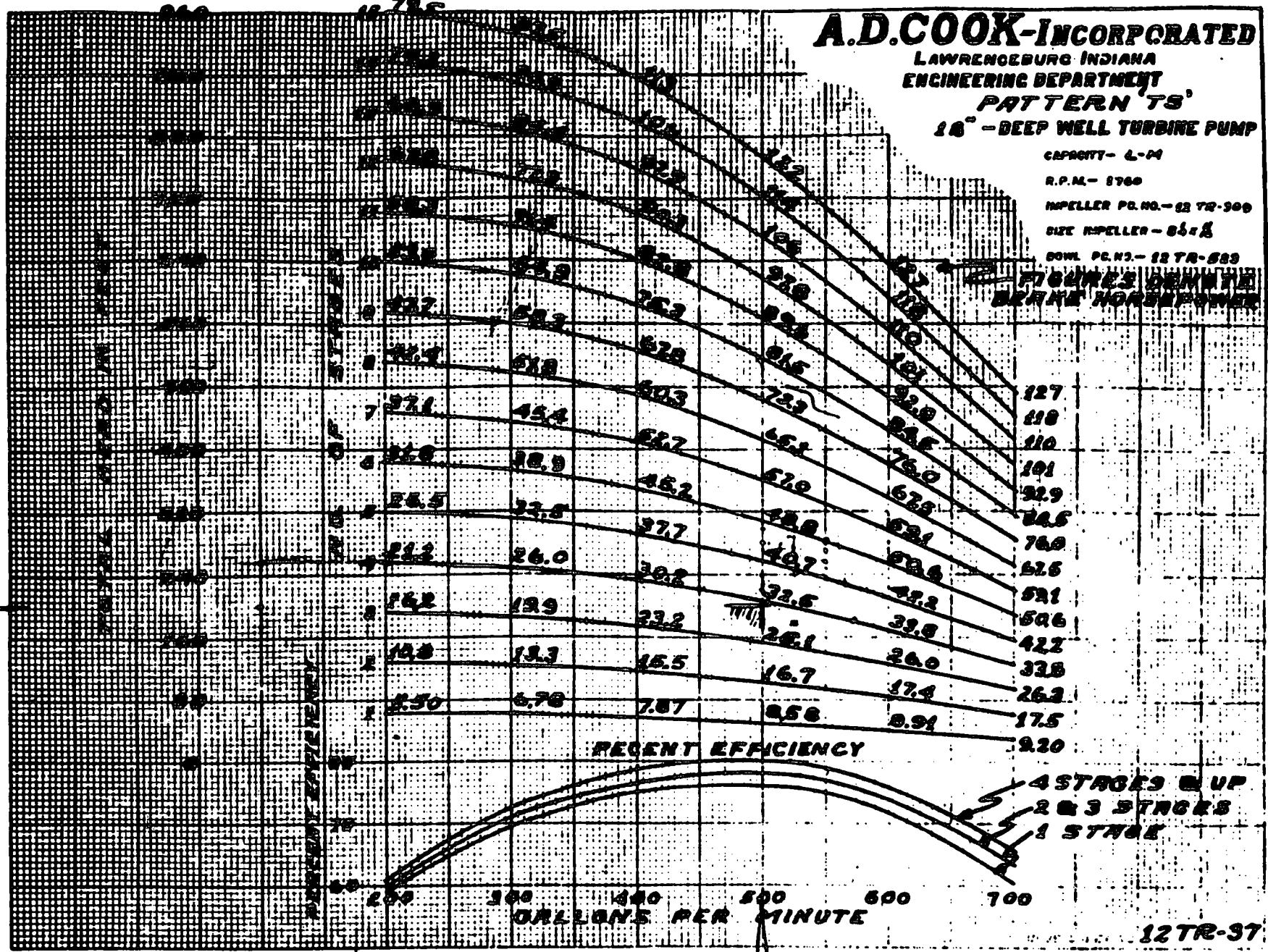
SIZE IMPELLER - 8 1/2" X 8

SOUL P.C. NO. - 12 TR-523

FIGURES DENOTE
BRAKE HORSEPOWER

EVERYTHING FOR THE WELL

200'

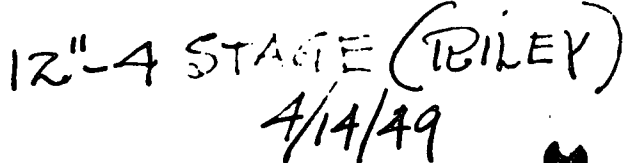


12TR-37

DATE 2-11-40 TESTED BY GP PLOTTED BY MM TRACED BY MM TAKEN FROM TESTS 242-240-244

12"-4 STAGE (TRILEY)
4/14/49

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✓

John J. Riley C.
228. Helen St
Albany

Invoice
12/10/59

Sept 2, 1959 - Set up Boom and
Pulled out Submersible
Pump - 2 men
18 hours. 87.12
Boom Trunk & Equip 46.00

Sept 3, 1959 - Set Submersible Pump
back in hole - 2 men
20 1/2 hours. 99.22
Boom Trunk & Equip 40.00

Mr. Muter Sept. 3 - 8 hrs. @
5.00 per hr. = 40.00

Working on Stanten Street Plate & Welding 9.00
\$315.34

000000

March 17, 1960

John J. Riley Company
228 Salem Street
Woburn, Massachusetts

Attention: Mr. John J. Riley Jr.

Gentlemen:

We are enclosing check in the amount of ten dollars (\$10.00) to cover yearly rental for certain space allotted to the D. L. Maher Company for storing casings, etc.

Mr. Maher advised us to state that the responsibility for any loss of equipment from this rented space, or any accidents to our men or equipment incurred while on your property is wholly our responsibility.

We wish to thank you again for your kindness in making it possible for us to have this space at this time.

Very truly yours,

D. L. MAHER COMPANY

Robert J. Walsh
Vice President

RJW/hrb
encl.

000009

Report of Tests Run on Wells of J. J. Riley Woburn

Re Opening of Old Well

6" Pipe 4" Orifice						
Day	Date	Time	Back Pressure	Offing	GPM	Draw Down To
Tues	8/6/68	4 PM	80 #	23"	305	11-13'
Wed	8/7/68	7.15 AM	80 #	23"	305	13'
"	"	8:30 AM	80 #	23"	305	13'
"	"	9:30 AM	80 #	23"	305	13'
"	"	10:30 AM	80 #	23"	305	13'

AT This Time I Think The old well is quite well Balanced @

300 gpm w/ 12-13 ~~Static~~ Water Level Pumping Against 80# ~~Back~~ ^{Line} Press

I also Think The Pipe leading to the Plant is Leaking

Report of Draw Down

✓

New Well (Sub) of J. J. Ricks Woburn

Tests RAN Weeks 8/7/08

All Times in The A.M

Time	Well Drawn Down To	Time	Well Drawn Down To
	From top of Well		From top of Well
7:35	14'	9:20	28'
7:45	21'	9:25	28'
7:50	22'	9:30	29'
7:55	19'	9:35	29' 6"
8:00	27'	9:40	30' 6"
8:05	28'	9:45	30' 6"
8:10	30'	9:50	29'
8:15	25'	9:55	29' 6"
8:20	17'	10:00	27'
8:25	17'		
8:30	23'	10:30	28'
8:35	26'		
8:40	30'		
8:45	30'		
8:50	29'		
8:55	25'		
9:00	28'		
9:05	27'		
9:10	28'		
9:15	25'		

Dean L. Brown

000013

2

Location E. Side of RR. Track

D. L. MAHER CO.

RECORD OF TEST

8/3/68

Contract J. L. Burke

Orifice No Capacity To

Time	Pumping Level	Remarks
7:35 AM	14'	Pump was running (No Demand?) No Flow meter
7:45	21'	
7:50	22'	
7:55	19'	
8	27'	Pump rate apparently fluctuates with the demand in the plant.
8:05	28'	
8:10	30'	
8:15	25'	
8:20	17'	
8:25	19'	
8:30	23'	
8:35	26'	
8:40	30'	
8:45	30'	
8:50	29'	
8:55	25'	
9:00	28'	
9:05	27'	
9:10	28'	
9:15	25'	
9:20	28'	
9:25	28'	
9:30	29'	
9:35	29'6"	
9:40	30'6"	

Well No.

2

Location

E. Side of RR. Tracks

D. L. MAHER CO.
RECORD OF TEST

Contract

J. J. Riley

Orifice

No Capacity Test

Time

Pumping
level

9:45

30'-6"

9:50

29'

9:55

29'-6"

10:00

27'

10:30

28'

000012

INVOICE

J. J. Riley Company,
Salmon Street,
Woburn, Mass.

CONTRACT NO. 100-1-10

YOUR ORDER NO.

TERMS 30 days net. F.O.B.

SALESMAN

SHIPPED TO

SHIPPED VIA

PPD. OR COLL.

QUANTITY	DESCRIPTION	PRICE	AMOUNT
	<u>8/5/68</u>		
	Performing Tests on Gravel packed walls.		
	<u>PREPARED</u>		
3 hrs.	including travel	\$ 9.00	\$ 72.00
1 hr.	overtime	12.00	12.00
	<u>Slip (2):</u>		
3 hrs.	including travel	7.50	60.00
1 hr.	overtime	10.00	10.00
2 hrs.	including travel	7.50	60.00
1 hr.	overtime	10.00	10.00
	<u>17.00</u>		

000014

Abstract

INVOICE

No. 4339

J.J. Riley

INVOICE DATE **January 29, 1971**
OUR ORDER NO. **P21-5-71**
YOUR ORDER NO.
TERMS **net 30 days** F. O. B.
SALESMAN
SHIPPED VIA **EXP. OR COLL.**

QUANTITY	DESCRIPTION	PRICE	AMOUNT
1 day	equipment - hydraulic pump rig	75.00	75.00
1	<u>Materials</u> B.J. 50hp 3/60/220, 1750 rpm, submotor (note: Air freight charges will be forwarded when received)		3,325.00
	Common carrier - Logan to North Reading		18.40
10	1/2" x 2-1/4" 304SS hex cap screws		5.00
10	1/2 x 1-1/2" 304SS " " "		10.00
20	1/2 316 SS hex nuts		15.20
30	1/2 304 SS lockwashers lockwashers		4.30
1	3" hard gasket		1.00
10	3/4"x3" cad. hex. nut and bolts		6.00
1	1/4" compression union		.51
3	rolls plastic tape		6.00
1	roll rubber tape		2.00
12	1/2" x 3" hex bolts and nuts		3.00
5	3/4" bandit S.S.		6.00
2	3/4" S.S. bandit bolts		1.20
2	protective caps for bolts		.70
	<u>Subtotal</u>	18.50	210.00
	<u>Tax</u>	.15	6.00
	TOTAL		\$4,378.65

Tax exempt 1041-774-740

000015

B. L. MAHER CO.

WOBURN • WICHITA, KANS.

INVOICE

No. 4999

J.J. Riley
228 Salem Street
Woburn, Mass.

INVOICE DATE

January 29, 1971

881-5-71
YOUR ORDER NO.

TERMS

F.O.B.

net 30 days

SHIPPED VIA

P.O. OR COLL.

SHIPPED TO

QUANTITY	DESCRIPTION	PRICE	AMOUNT
	1/9/71 (Saturday) - disconnected pipe line, gate would not close tight, waited for line to drain- removed wall cover and pulled pump up to top of well. Motor seized up.		
10 hrs. (overtime)	pump man, including travel	13.00	130.00
10 hrs. (overtime)	helper, including travel	11.00	110.00
15 mi.	Mileage (pump rig)	.15	2.25
1 day	Equipment, pump rig	75.00	75.00
	1/11/71- removed pump-load column and materials and return to N. Reading		
hrs.	pump man, including travel	10.50	63.00
hrs.	helper, including travel	9.00	45.00
mi.	road truck	.15	2.25
		.15	2.25
			37.50

JOHN J. RILEY COMPANY
WOBURN, MASSACHUSETTS 01801

DATE	REFERENCE	AMOUNT	BALANCE	DISCOUNT
5				
4 FEB 71	4,999	4,878.66	4,878.66	
3				
2				
1				
8				
7				
6				

NCR PAPER PATENTED BY NCR CO.

ES-826

REMITTANCE ADVICE

000016

R. L. MAHER CO.

MAINTENANCE & REPAIR WORK

WOBURN

INVOICE

No. 5018

J.J. Riley
222 Salem Street
Woburn, Mass.

INVOICE DATE

March 23, 1971

OUR ORDER NO.

PO 1-5-71

YOUR ORDER NO.

TERMS

F.O.B.

net 30 days

SALESMAN

SHIPPED TO

SHIPPED VIA

PPD, OR C.O.D.

QUANTITY	DESCRIPTION	PRICE	AMOUNT
1	Coult 3770 Size 3DL All iron centrifugal pump <i>sales tax</i> 30 Mass. Tax		343.00 10.29
	<u>TOTAL</u>		353.29

*Pd
4-6-71*

JOHN J. RILEY COMPANY

WOBURN, MASSACHUSETTS 01801

DATE	REFERENCE	AMOUNT	BALANCE	DISCOUNT
3-31-71	5.018	343.00	343.00	

MCR PAPER PATENTED BY MCR CO

ES-926

REMITTANCE ADVICE

000017

D. L. MAHER CO.

BRIDGE - WOBURN, MASS.

INVOICE

No. 3465

J.J. Riley Company
228 Salem Street
Woburn, Mass.

Page 1
INVOICE DATE

September 20, 1972

OUR ORDER NO.

788-5-72

YOUR ORDER NO.

TERMS

F.O.B.

net 30 days

SALESMAN

SHIPPED TO

SHIPPED VIA

PPG, OR COLL.

QUANTITY	DESCRIPTION	PRICE	AMOUNT
6	6" ring gaskets		9.00
48	3/4x3" hex bolts & nuts		23.80
50"	6" pipe		31.06
3"	1" pipe		2.00
2	2" x 6" nipples		5.85
1	2"x6" nipple		1.31
2	2" blk mall elbows		4.54
1	2" " union		4.77
18"	7/8 threaded rod		1.80
1	1/4"x8" square plate		3.50
1	1/4" gas cock		4.72
1	bracket for gauge		3.30
4	3/4"x4" studs		2.40
4	5/8x4" studs		2.00
3	3/4 nuts		1.60
34"	3/8 O.D. plastic tubing		6.80
1	0-70 altitude gauge		7.00
1	roll plastic tape		2.50
2"	6" tail pipe		14.78
	Misc. small piping		5.71
	General repair on 40HP U.S. Motor - changed top and lower bearings and lock nuts and checked motor for service		237.49
37"	12" pipe	2.00/'	296.00
4	6" stop on flanges		56.00
6"	3/8 x 3" flat bar		10.90
6"	1/2" x 3" flat bar		7.80
15"	1" x 3" flat bar		4.80
3	90 lbs. bags sand mix		22.50
1	B.I. 6" C-1 7 stage		
30"	1-3/16 x 6" WLC		
1	6" x 18-1/2" GSR head with sole plate and 2 2 piece head shaft		
			1,470.00
	TOTAL		\$7,696.64

000018

D. L. MAHER CO.

P.L. MAHER • WOBURN, MASS.

WOBURN

INVOICE

No. 5465

J.J. Riley Company
228 Salem Street
Woburn, Mass.

INVOICE NO. 2

September 20, 1972

OUR ORDER NO.

P28-5-72

YOUR ORDER NO.

TERMS

F.O.B.

Net 30 days

SALESMAN

SHIPPED TO

SHIPPED VIA

P.P.O. OR COLL.

QUANTITY	DESCRIPTION	PRICE	AMOUNT
12 hrs.	Aug. 21, 1972 - Developing well, gravel to within 18" of top machine hours	45.00	540.00
12 hrs.	Aug. 22, 1972 - developing well machine hours	45.00	540.00
8 hrs.	Aug. 23, 1972 - Finished developing, pulled surge pipe, loaded truck, & returned to shop machine hours	45.00	360.00
4 hrs.	Aug. 24, 1972 - tear down rig machine hours	45.00	180.00
3 hrs.	Sept. 6, 1972 - set pump & started making pipe connections service man	11.00	33.00
1/2 hr.	overtime	13.75	6.87
3 hrs.	helper	9.50	28.50
1/2 hr.	overtime	11.50	5.75
20 mi.	hydraulic rig mileage	.15	3.00
3 hrs.	Sept. 7, 1972 - Finished pipe line & blow-off pipe, grouted 24" casing & ran pump to waste service man	11.00	33.00
1-1/2 hrs.	overtime	13.75	20.62
3 hrs.	helper	9.50	28.50
1-1/2 hrs.	overtime	11.50	17.25
10 mi.	hydraulic rig mileage	.15	1.50
72-1/2 hrs.	Shop Labor	11.00	247.50
1	Materials 12" stainless steel screen 10'-0" 194 slot freight		935.60
5 ton	filter gravel 3/8 x 3/16		12.31
36"	24" pipe		175.00
			36.00

000019

D. L. MAHER CO.

PAID BY BANK - WOBURN, MASS.

WOBURN, MASS.

INVOICE

No. 2465

J.J. Riley Company
228 Salem Street
Woburn, Mass.

INVOICE DATE

September 20, 1972

OUR ORDER NO.

282-5-72

YOUR ORDER NO.

TERMS

F.O.B.

net 30 days

SALESMAN

SHIPPED TO

SHIPPED VIA

PPG OR CCLL

QUANTITY	DESCRIPTION	PRICE	AMOUNT
2 hrs. 25 mi.	Aug. 3, 1972 - inspecting pump service man mileage	11.00 .15	22.00 3.75
3-1/2 hrs. 3-1/2 hrs. 3-1/2 hrs. 25 mi.	Aug. 4, 1972 - Pull 50HP pump & return all to shop service man helper helper hydraulic rig mileage	11.00 9.50 9.50 .15	33.50 33.25 33.25 45.00 3.75
3 hrs. 2-1/2 hrs. 8 hrs. 2-1/2 hrs. 23 mi.	Aug. 11, 1972 - Set 36'-11" of 12" casing, break up old foundation and weld pipe service man overtime helper overtime hydraulic rig mileage	11.00 12.75 9.50 11.50 .15	33.00 34.37 76.00 23.75 105.00 3.75
3-1/2 hrs.	Aug. 14, 1972 - set up machine time	45.00	157.50
8 hrs.	Aug. 15, 1972 - welded 12" casing & guides, bailed 12" casing to bottom of well machine time	45.00	360.00
4-1/2 hrs.	Aug. 16, 1972 - Set 12" screen, set surge pipe machine time	45.00	202.50
1 hr.	Aug. 17, 1972 - Installing set gravel & guides for surge block machine hours	45.00	135.00
9 hr.	Aug. 18, 1972 - Pulled 12" casing back to 9'-6" to expose screen & started developing machine hours	45.00	405.00

000020

INVOICE

7933

R. L. WATSON CO.

1000 W. 10th Avenue SE

Tulsa, Oklahoma 74103

Phone 333-2222

P.O. BOX 1000
Tulsa, Oklahoma
74103

INVOICE DATE

January 19, 1981

ORDER NO.

PH 1-4-81

YOUR ORDER NO.

TERMS

F.O.B.

Net 15 days

SALESMAN

SHIPPED VIA

P.D. OR COLL.

QUANTITY	DESCRIPTION	PRICE	AMOUNT
	January 7, 1981		
	Pulled the submersible pump - motor was blown and shorted - tried to install a new motor but hub was too tight. Brought motor to machine shop.		
7 1/2 hr.	<u>Service man</u> including travel time	24.50	183.75
7 1/2 hr.	<u>Helper</u> including travel time	22.00	165.00
	Hydraulic rig		180.00
16 mi.	<u>Mileage</u>	.70	11.20
	January 8, 1981		
	Repacked pump and motor - suggest installing in motor well - changed ltrn system drawing oil now		
	<u>Service man</u>	24.50	196.00
	<u>Helper</u>	22.00	57.00
	including travel time	22.00	176.00
		24.50	51.00
			129.00
			11.20
	January 10, 1981		
	Repacked pump and motor - suggest installing in motor well - changed ltrn system drawing oil now		

000023

D. L. RILEY CO.
P. O. BOX 107 - CONCORD ST.
MILFORD, MA 01860
508-485-1111

Page 2 of 3

J.J. RILEY'S
Salem Street
Woburn, MA

INVOICE DATE	January 23, 1981
OUR ORDER NO.	PR 7-6-81
YOUR ORDER NO.	
TERMS	Net 15 days
SALESMAN	
SHIPPED VIA	

SHIPPED TO TAXES OR COLL.

QUANTITY	DESCRIPTION	PRICE	AMOUNT
	to shop.		
3 hr.	<u>Service man</u>		
1/2 hr.	Including travel time	24.50	196.00
	overtime	28.50	14.25
3 1/2 hrs.	<u>Helper</u>		
	Including travel time	22.00	77.00
	Hydraulic rig		90.00
16 mi.	<u>Mileage</u>	.70	11.20
	January 23, 1981		
	Assembled pump at the shop - Set pump and motor and column and ran test on the well.		
3 hr.	<u>Service man</u>		
1 1/2 hr.	Including travel time	24.50	124.75
	overtime	28.50	42.75
3 hr.	<u>Helper</u>		
	Including travel time	22.00	66.00
	Hydraulic rig		90.00
	Drill and tap pump valve and	24.50	124.75
	Return coupling		57.60
			42.00

A. L. HUNTER CO.
P.O. BOX 107 • DORCHESTER ST.
NEW BEDFORD, MA 01904
TELEPHONE 225-0219

Page 3 of 3

INVOICE DATE
January 29, 1961OUR ORDER NO.
PR 1-6-61

YOUR ORDER NO.

TERMS
Net 15 days

F.O.B.

SALESMAN

SHIPPED VIA

A. L. HUNTER CO.
Sales Street
New Bedford, MA

SHIPPED TO: P.O. OR COLL.

QUANTITY	DESCRIPTION	PRICE	AMOUNT
<u>MATERIALS</u>			
16	2 1/2" Fire hose fittings		50.40
1	3/4 x 1-1/2" nuts bolts and locks	1.40	22.40
1	2" Hipple		2.40
1	2" Blk. bushing		4.15
1	2 1/2" Coupling		8.16
	5% mass tax		4.33
	<u>Total</u>		\$2,543.79

ALL BALANCES OF 1961
PAYMENTS WILL BE
MADE ON ALL BALANCES
EXCEEDING 45 DAYS.

000025

COPY

D. L. MAHER CO.

February 12, 1980

J.J. Riley
Salem ST
Woburn, MA 01801

Att: Mr. Jack Riley

Dear Jack:

On January 13, 1981, we began testing by driving and washing 2 1/2" pipe on the easterly side of the railroad track. Wells were driven at three locations with the following results.

Well 81-1

This site was 300' north of the existing gravel packed well parallel with the railroad track. The well was driven to 26' through fine to coarse brown sand. Refusal was at 26', then the well was pulled.

Well 81-2

This site was located northeast from the existing well adjacent to the dirt road.

The material found was:

0 to 28'	Fine brown sand
28' to 35'	Fine to coarse brown sand with traces of clay
35' to 42'	Fine to coarse brown sand with traces of clay
42' to 49'	Fine to coarse brown sand with fine to medium gravel
49' to 56'	Fine to coarse brown sand with fine gravel

The well was pulled back to 49' and a 40 slot screen was set. The well pumped 20 GPM @ 26" vacuum. No observation well was driven and this well was removed after tests on 81-3.

Well 81-3

The site is located approximately 15-20' from the edge of the swamp, northeast from the existing well, east of the dirt road and sewer main.

The well was driven and washed to refusal at 57' through the following materials.

0 to 35'	Fine to coarse brown sand with traces of clay
35' to 42'	Fine to coarse brown sand, fine gravel with traces of clay
42' to 49'	Fine to coarse brown sand and fine to medium gravel
49' to 57'	Fine to coarse brown sand

000026

COPY

D. L. MAHER CO.

The well was pulled back to 49' and a 30 slot screen was set. The well pumped 50 GPM @ 21" vacuum. An observation well was driven to 49', two feet from well 81-3. A 30 slot screen was set.

Well 81-3 was test pumped at 50 GPM with a drawdown in the observation well of 1 foot 4 inches, a specific capacity of 37 GPF.

On January 23, 1981, the existing well was pumped at 586 GPM for an hour fifteen minutes. Well 81-3 had a drawdown of 6".

After analyzing the material and studying the test results, we recommend and propose the following:

To furnish all equipment, labor, and materials to construct a 24" x 18" gravel packed well to a depth of 49' with 10' of stainless steel well screen. Developed and test pumped for one hour.

The well will have a capacity of up to 700 GPM as determined by the pump test.

PRICE: \$ 40,600.00

Not included: Site preparation, permits, access across MDC right of way, taxes, structures.

The pumping equipment would be sized after the pumping test, but a budget figure could be \$17,000.00 to duplicate what you presently have. An alternate would be a turbine pump at approximately \$11,000.00. Neither price includes installation, an additional \$1,500.00.

Not included: Discharge gate valve, check valve. Included: Electrical, structures, taxes.

On January 23rd the existing well was test pumped at 586 GPM for one hour fifteen minutes with a drawdown of 27'-6½" or a specific capacity of 21.3 gallons per minute per foot of drawdown (gpf). The well when originally installed showed 51 GPF after a 24 hour pump test. A similar test (1.25 hr.) in 1977 showed a capacity of 66 GPF after chemical treatment and redevelopment. During the test, grab samples were taken without any trace of sand. The well is plugged by either mineral encrustation, iron bacteria growth or sand locking and has fallen off 65% since 1977.

Immediate treatment would involve injecting chlorine into the well followed by 1000 gallons of water to push it into the formation. This is followed by muriatic acid and another 1000 gallons of water. Let this stand overnight and then pump to waste. There is a good chance this will temporarily improve the GPM/ft. of drawdown. Two days would be sufficient to accomplish this treatment. Labor would be at the published service rates for chemical injection and setting up the discharge. Pumping to waste, monitoring PH and line neutralizing will be done by Riley personnel.

The submersible motors will be sent to L.A. after M.E.C. returns

000027

COPY **D. L. MAHER CO.**
one they are inspecting. The accompanying pump will be dismantled, cleaned and inspected and then you will receive a written report of the condition and estimated repair costs. A 50HP exchange motor and cable are on order and are scheduled for the third week of March. Byron Jackson made a mistake when they said there were eight 220 volt motors - they were 440. We apologize for Byron Jackson's error and they will do everything to expedite the delivery.

I believe this covers everything, but should you have any further questions, please do not hesitate to call.

Sincerely,

D.L. MAHER CO.

Denis L. Maher Jr.

pag

Encs.

000028

Rikeys

Sept 22, 1977

Thur 12:00 - 4:30 Set up rig + TIB
4:30 - 6:00 Pulling Pump

Sept 23, 1977

Fri 7:00 - 8:00 Load Truck Go to Manns
for Chemicals
8:00 - 11:00 Pull Pump Put in Bleach
11:00 - 12:00 Set Surge Pipe
12:00 - 12:30 Lunch
12:30 - 4:00 Pump Bleach to waste
4:00 - 5:00 Put in Acid + Dry Surge
Well showing 28 G.P.F.

Sept 26, 1977

Mon. 7:00 - 8:00 Load Drill Bar
8:00 - 11:00 Put on Drill + Hook up 4" Pump
Adjust Clutches on rig
11:00 - 12:00 mid, Surge + Dry Surge

Sept 27, 1977

Tues 12⁰⁰_{mid} - 12⁰⁰_{noon} Surge + Dry Surge
12:00 - 4:00 Pull ~~the~~ Surge Pipe Take
down TIB - Load Truck
Well showing 66 G.P.F.

MATERIALS - 30 GALS Bleach - 250 lbs Acid

000021

INVOICE

18030

E. L. MAHER CO.

P.O. BOX 125 • CONCORD ST.

NEW BRIDGES, MA 01860

(617) 833-3313

M. H. Riley,
Sales Street,
Woburn, Ma.
01801.

INVOICE DATE

April 29, 1991.

OUR ORDER NO.

P.R.

YOUR ORDER NO.

TERMS

F.O.B.

Net 15 days

SALESMAN

SHIPPED VIA

SHIPPED TO

P.P.D. OR COLL

QUANTITY	DESCRIPTION	PRICE	AMOUNT
	<p>Inspection of 2nd Submersible Motor</p> <p>Expenses</p> <p>Shop labor to disassemble, clean and re-assemble, paint bcyf assembly</p> <p>7 1/2 hours @ \$24.50 per hour</p>		<p>\$ 100.00</p> <p>183.75</p> <p><u>\$ 283.75</u></p>
<p>STATE CITY C</p> <p>MONTHLY WILL BE</p> <p>MADE ON ALL BALANCES</p> <p>EXTENDING 45 DAYS.</p>			

000022

D. L. MAHER CO.

LOG OF TEST WELL

Log of Well for J. J. Riley Test No. 81-1
 Address Salem S.t.
 Well located at J. J. Riley in Woburn County, State of Mass.
 Date Drilling started 1/13/81 Date Test Hole Completed 1/13/81
 Total depth to bottom of Well 26' Diameter Test Hole 2 1/2"
 Water stands when not pumping _____ feet _____ inches from the surface of the ground.

EACH STRATUM	DEPTH OF STRATA	FORMATION FOUND EACH STRATUM	
0' - 26'		Fine Brown Sand to Coarse Brown Sand	Did Well Clear Up?
			How Long?
			Time Pumped?
			Drawdown Ft. In.
			Capacity
26'		"Refusal"	Time Required for Recovery?
			Was Well Pulled? <u>yes</u>
			Observation <u>no</u> What Depth?
			Was Observation Well Pulled?
			Map of Location
			<u>Salem S.t.</u>
			<u>Aberona</u>
			<u>Dist Rd</u>
			<u>Gravel pit</u>
			<u>300'</u>
			<u>81-1</u>

Remarks and opinion of Test pulled well out

Driller Frank Lavoie
 Helper Joe Anderson

000029

D. L. MAHER CO.

LOG OF TEST WELL

Log of Well for J. J. Riley Test No. 81-2
 Address Salem Jct
 Well located at J. J. Riley in Woburn County, State of Mass.
 Date Drilling started 1/16/81 Date Test Hole Completed 1/17/81
 Total depth to bottom of Well 56' Diameter Test Hole 2 1/2"
 Water stands when not pumping 4' feet 7" inches from the surface of the ground.

EACH STRATUM	DEPTH OF STRATA	FORMATION FOUND EACH STRATUM	
0' - 28'		Fine Brown Sand	Did Well Clear Up? <u>yes</u>
			How Long? <u>3 1/2 hrs</u>
28' - 35'		Fine Brown Sand	Time Pumped? <u>1 hr</u>
		to Coarse Sand	Drawdown Ft. In.
		and traces of	Capacity <u>20 GPM 26" Vac. at 49'</u>
		Clay	Time Required for Recovery?
			Was Well Pulled? <u>no</u>
35' - 42'		Fine Brown Sand	Observation <u>no</u> What Depth?
		to Coarse Sand	
		and traces of Clay	Was Observation Well Pulled?
42' - 49'		Fine Brown Sand	
		to Coarse Sand	Map of Location
		and Fine to med	<u>Salem Jct</u>
		Gravel	<u>Aberdeen</u>
49' - 56'		Fine Brown Sand	<u>Gravel pack</u>
		to Coarse Sand	<u>81-2</u>
		and Fine Gravel	<u>R.R.</u>
56'		"Refusal"	

Remarks and opinion of Test pulled Well Back to 49' set a 40 slot
Screen. Well pumped 20 GPM 26" Vac.

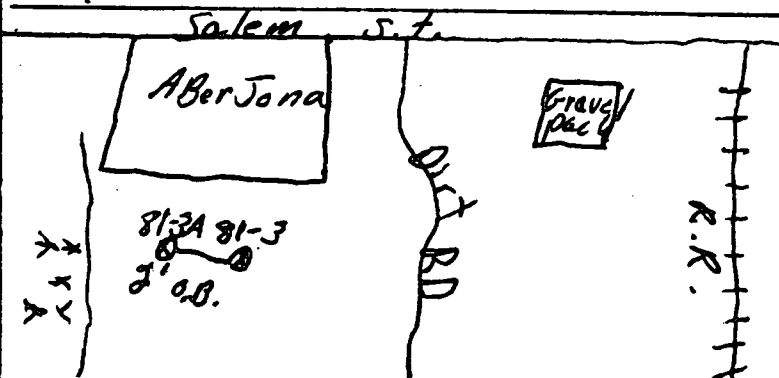
Driller Fred Savin
 Helpers Joe Anderson

000030

D. L. MAHER CO.

LOG OF TEST WELL

Log of Well for J. J. Riley Test No. 81-3-3A
 Address J. J. Riley in Woburn
 Well located at J. J. Riley in Woburn County, State of Mass.
 Date Drilling started 1/15/81 Date Test Hole Completed 1/19/81
 Total depth to bottom of Well 57' Diameter Test Hole 2 1/2"
 Water stands when not pumping 1' feet 10" inches from the surface of the ground.

EACH STRATUM	DEPTH OF STRATA	FORMATION FOUND EACH STRATUM	
0' - 35'		Fine Brown Sand and some Coarse and traces of Clay	Did Well Clear Up? <u>yes</u>
35' - 42'		Fine Brown Sand Coarse Sand and Fine Gravel and traces of Clay	How Long? <u>5 hrs Developing Time</u> <u>7 hrs Total</u>
			Time Pumped? <u>3 hrs and 4 hrs pump to</u>
			Drawdown <u>1' Ft. 4" In.</u>
			Capacity <u>50 GPM 21" vac. at 49'</u>
			Time Required for Recovery? <u>1/2 hr.</u>
			Was Well Pulled? <u>no</u>
			Observation <u>yes</u> What Depth? <u>49'</u>
42' - 49'		Fine Brown Sand Coarse Sand and Fine tamed Gravel	<u>50 GPM 22" at 49'</u>
			Was Observation Well Pulled? <u>no</u>
			Map of Location
			
49' - 57'		Fine Brown Sand and Coarse Sand	
57'		"Refusal"	

Remarks and opinion of Test pulled Well Back to 49' Refusal is 57'
and a.B. well is 49' set a 30 slot screen in well and a 30
Slot screen in a.B. 2' well and a.B.
pumped 50 G.P.M

Driller Frank Larrie
 Helpers Joe Anderson

000031

✓
April 15, 1958

John J. Riley Co.
228 Salem Street
Woburn, Massachusetts

Re: Turbine Pump for
Gravel Well No. 2

Attention: Mr. John J. Riley, Jr.

Gentlemen:

We wish to quote you a price for a Byron Jackson Mercury Sealed Submersible Motor and Turbine Pump for a capacity of 700 G. P. M. against a Total Dynamic Head of 200 ft.

1 - 12" 4 Stage Pump
35 ft. of 8" Column
1 - Surface Plate
1 - 50 H. P. Submersible Motor 3/60/220 Volt 1760 R. P. M.
Base Cable #1/0 plus 35 ft. of extra cable

Price - F. O. B. Factory, Freight Allowed to Woburn, Mass. - \$4400.00

We would be very glad to give you a sketch of a concrete block pump chamber for this unit. If you wish us to do so, please advise Mr. Maher.

You will require an 8" Gate Valve and an 8" Non-Slam Check Valve to be located in the pump chamber.

Any installation charges for this pump would be approximately one hundred and seventy-five dollars (\$175.00).

000050

✓
April 15, 1958

John J. Riley Co. - Page 2

You would want to arrange for your electrician to bring the Power lines down to the pump chamber.

Any further details you may require, please advise.

Very truly yours,

D. L. MAHER COMPANY

Robert J. Walsh
Vice President

RJW:ent

Approved - John J. Riley Co.

By _____

000051

D. L. MAHER CO.

Telephones
Kirkland 7-1438 • WOburn 2-0049 • WOburn 2-2046

GRAVEL WALL AND DRIVEN WELLS • MUNICIPAL • INDUSTRIAL • DOMESTIC SUPPLIES

BYRON-JACKSON CO., PUMPS
TURBINE AND SUBMERSIBLE

38 B BRATTLE STREET
CAMBRIDGE 38, MASS.

April 15, 1958

John J. Riley Co.
228 Salem Street
Woburn, Massachusetts

Re: Turbine Pump for
Gravel Well No. 2

Attention: Mr. John J. Riley, Jr.

Gentlemen:

We wish to quote you a price for a Byron Jackson Mercury Sealed Submersible Motor and Turbine Pump for a capacity of 700 G. P. M. against a Total Dynamic Head of 200 ft.

1 - 12" 4 Stage Pump
35 ft. of 8" Column
1 - Surface Plate
1 - 50 H. P. Submersible Motor 3/60/220 Volt 1760 R. P. M.
Base Cable #1/0 plus 35 ft. of extra cable

Price - F. O. B. Factory, Freight Allowed to Woburn, Mass. - \$4400.00

We would be very glad to give you a sketch of a concrete block pump chamber for this unit. If you wish us to do so, please advise Mr. Maher.

You will require an 8" Gate Valve and an 8" Non-Slam Check Valve to be located in the pump chamber.

Any installation charges for this pump would be approximately one hundred and seventy-five dollars (\$175.00).

signed & returned 4/22/58 JJK

000048

D. L. MAHER CO.

✓
Telephones
Kirkland 7-1438 . WOburn 2-0049 . WOburn 2-2046

GRAVEL WALL AND DRIVEN WELLS . MUNICIPAL . INDUSTRIAL . DOMESTIC SUPPLIES

BYRON-JACKSON CO., PUMPS
TURBINE AND SUBMERSIBLE

38 B BRATTLE STREET
CAMBRIDGE 38, MASS.

April 15, 1958

John J. Riley Co. - Page 2

You would want to arrange for your electrician to bring the
Power lines down to the pump chamber.

Any further details you may require, please advise.

Very truly yours,

D. L. MAHER COMPANY

Robert J. Walsh
Robert J. Walsh
Vice President

RJW:cmt

Approved - John J. Riley Co.

By *John J. Riley Co.*

000049

Date Received _____

Application No. _____

Application for A Permit to Discharge Wastewater into
the Sewerage System of the Local Municipality and the Metropolitan
District Commission.

Instructions: Complete the following sections. Use extra
sheets if needed and label each supplemental
sheet by placing the Applicant's name at
the top of the page.

Part I

General Information

1. Date of Application November 10, 1978
2. Type of Application Existing discharge X Proposed discharge _____
3. Business Name of Applicant John J. Riley Company
Address 228 Salem Street Woburn, Ma. Zip Code 01801
street, city or town
Tel. No. 933-5900
4. Name of Applicant's on-site representative in charge of wastewater disposal:
Name Charles J. Sheehan Title _____
Address 228 Salem Street, Woburn, Ma. Zip Code 01801
street, city or town
Tel. No. 933-5900
5. Name of Applicant's authorized agent for signature
Name John J. Riley, Jr. Title President

Business Name of Applicant John J. Riley Company

Address 228 Salem Street Woburn, Ma. Zip Code 01801
street, city or town

Tel. No. 933-5900

6. Principal Products or Services

A) Indicate principal products or services

Leather for Shoes and Handbags

B) Indicate applicable SIC Codes (if known) 3111

C) Indicate average production or service levels per year

7. Type of operation: List materials and quantities used per year in manufacturing products or providing services listed in Item #6 above.

	<u>lbs./yr.</u>		<u>lbs./yr.</u>
Sodium sulfhydrate	250,000	Sodium	160,000
Lime	1,100,000	Neutral naphthalene syntan	40,000
Ammonium sulfate	300,000	Dyestuffs	12,000
Sulfuric Acid	475,000	Pigments	12,000
Calcium formate	140,000	Sulfated marine oils	350,000
Basic Chromium sulfate	300,000	Surfactant	61,000
Sodium Chloride	1,320,000		

8. Number of Employees 135 Operating hours 24 hrs./day-5 days/week
Number of shifts 3

9. Water Supply

A) Source (eg. public, public utility, well or surface) Our own well.

B) Volume per year(cubic feet or gallons) 10 mil cu ft/yr.

10. Water Usage

	<u>gallons/day</u>	<u>Discharge Location(check one)</u>	
		<u>Sanitary Sewer</u>	<u>Storm Drain or Surface Water</u>
A) Sanitary Wastewater (domestic only)	<u> </u>	<u> </u>	<u> </u>
B) Process Wastewater	<u>300,000</u>	<u>300,000</u>	<u> </u>
C) Water Incorporated in product	<u>nil</u>	<u> </u>	<u> </u>
D) Uncontaminated Water (eg.cooling water)	<u>4,000</u>	<u>4,000</u>	<u> </u>
E) Other (specify)	<u> </u>	<u> </u>	<u> </u>

11. Seasonal and batch type discharges. Describe duration, process rate or flow, quantity and disposal location of any seasonal or batch discharges.

Operation is a batch operation which taken together result in a fairly uniform rate of discharge. We are limited by our well capacity from using great amounts of water during any given hour.

12. Do you segregate wastewater from non process wastewater?

 Yes X No

If "yes", please describe:

Business Name of Applicant John J. Riley Co.

13. How many discharge connections do you have to the municipal or MDC sewerage system, excluding storm drain connections? 1
Describe by street name and assign a number to each connections:

<u>Connection No.</u>	<u>Street Name</u>	<u>Type(s) of wastewater discharging</u>
-----------------------	--------------------	--

14. For each connection to the sewerage system listed in Item 13., complete Part II and attach hereto.

On behalf of the applicant, I hereby apply for a permit to discharge the waste(s) described herein to the sewerage systems of the municipality and the Metropolitan District Commission. I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief the information submitted is true, complete and accurate.

In filing this application the applicant agrees to abide by the municipal sewer use ordinance or bylaw and the MDC Sewer Use Rules and Regulations adopted under Chapter 92 Massachusetts General Laws, Chapter 705 of the Acts of 1945 and applicable requirements of State and Federal Law.

Authorized Agent

Title

Applicant Name John J. Riley Company

Discharge Connection Number _____

Municipality's Name (eg. Boston) Woburn

Part II

Characteristics of Wastewater Discharges

Instructions: If you have only one connection with both process wastewater and sanitary wastewater combined, put information under process wastewater and indicate types of wastewater.*

1. Volume - gallons per day

	<u>Volume</u>	<u>No. of hours discharged</u>
A) Sanitary Wastewater (domestic only)		
i) Average daily	_____	_____
ii) Maximum hourly	_____	_____
iii) Maximum daily	_____	_____
B) Process Wastewater		
i) Average daily	<u>280,000</u> gal.	<u>17</u>
ii) Maximum hourly	<u>35,000</u> gal.	
iii) Maximum daily	<u>310,000</u> gal.	
* iv) Types of wastewater, if applicable	_____	
C) Uncontaminated Water		
i) Average daily	<u>4,000</u> gal.	<u>24</u>

000058

Applicant Name John J. Riley Company

Discharge Connection Number _____

Municipality's Name(eg.Boston) Woburn

	<u>Volume</u>	<u>No. of hours discharge</u>
ii) Maximum hourly	<u>175 gal.</u>	-
iii) Maximum daily	<u>4000 gal.</u>	

D) Other

i) Average daily	_____	_____
ii) Maximum hourly	_____	
iii) Maximum daily	_____	

2. Characteristics of Wastewater

A) Sanitary (domestic) if available

BOD ₅	_____ mg/l (milligrams per liter)
Total suspended solids	_____ mg/l

B) Process Wastewater

i) BOD ₅	<u>2100</u> mg/l
Suspended Solids	<u>1850</u> mg/l
Dissolved Solids	_____ mg/l

pH	Average <u>9.0</u>	Range <u>6.3-10</u>
----	--------------------	---------------------

ii) Metals	<u>Maximum daily</u>	<u>Monthly average in</u>
	<u>in mg/l</u>	<u>mg/l</u>
Copper	<u>0</u>	_____
Chromium(+6)	<u>0</u>	_____

000059

Applicant Name John J. Riley Company

Discharge Connection Number _____

Municipality's Name(eg.Boston) Woburn

	<u>Maximum daily in mg/l</u>	<u>Monthly average in mg/l</u>
Chromium(+3)	<u>49</u>	<u>49</u>
Cadmium	<u>0</u>	<u> </u>
Nickel	<u>0</u>	<u> </u>
Zinc	<u>0</u>	<u> </u>
Lead	<u>0</u>	<u> </u>
Mercury		
Others:		
<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>
iii) Non metals		
Arsenic	<u>0</u>	<u> </u>
Cyanide	<u>0</u>	<u> </u>
Chloride	<u>Unknown</u>	<u> </u>
Sulfate	<u>Unknown</u>	<u> </u>
Others:		
<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>
iv) Hydrocarbons and Asbestos Compounds		
phenols	<u>0</u>	<u> </u>

Applicant Name John J. Riley Company

Discharge Connection Number _____

Municipality's Name (eg. Boston) Woburn

	<u>Maximum daily in mg/l</u>	<u>Monthly average in mg/l</u>
benzene	<u>0</u>	_____
esters	<u>0</u>	_____
pesticides		
_____	<u>0</u>	_____
_____	_____	_____
_____	_____	_____
herbicides		
_____	<u>0</u>	_____
_____	_____	_____
_____	_____	_____
others:		
_____	_____	_____
_____	_____	_____
_____	_____	_____

C) Other wastewater - If applicable, describe as in 2.B) above.

000061

Applicant Name John J. Riley Company

Discharge Connection Number _____

Municipality's Name (eg. Boston) Woburn

3. Pretreatment

For wastewater discharges listed in Item 2. above, describe if applicable:

a) Pretreatment processes employed or used

The Tannery uses a catch basin to remove all large objects from waste stream and to settle with approximately two hours retention time. All the waste passes through bar screens before it enters the catch basin.

b) Efficiency in pretreatment, eg. % removal

Unknown

4. Water Reclamation, if applicable:

Describe in-plant water reuse and recycling.

Water use has always been held to a minimum at this Tannery. However, in an effort to reduce consumption still further a 5% reduction in water consumption was realized by re-using water remaining in unhairing vessels after the hides had been removed. Also, water is re-used in our Pasting Unit.

000062

John J. Riley Co
228 Salem St.
Woburn Mass.

Attn Mr. John D. Riley Jr.

Re:
Submersible pump
for Gravel Well

INVOICE

- 1 - 12" 4 Stage Byron Jackson pump
- 35 ft of column
- 1 - Surface plate Byron Jackson
- 1 - 50 HP Submersible motor 3/60/220V/1760 R.P.M.
- Base cable #1/0 plus 35' extra cable

Price F.O.B. Factory

freight allowed to Woburn Mass. ✓

Price ——— \$4400.00

our letter and quotation of April 15, 1958

Insured
6-27-58
Jim

000052

D. L. MAHER CO.

✓
Telephones
Kirkland 7-1438 · WOburn 2-0049 · WOburn 2-2046

GRAVEL WALL AND DRIVEN WELLS · MUNICIPAL · INDUSTRIAL · DOMESTIC SUPPLIES

BYRON-JACKSON CO., PUMPS
TURBINE AND SUBMERSIBLE

38 B BRATTLE STREET
CAMBRIDGE 38, MASS.

April 15, 1958

John J. Riley Co.
228 Salem Street
Woburn, Massachusetts

Re: Turbine Pump for
Gravel Well No. 2

Attention: Mr. John J. Riley, Jr.

Gentlemen:

We wish to quote you a price for a Byron Jackson Mercury Sealed Submersible Motor and Turbine Pump for a capacity of 700 G. P. M. against a Total Dynamic Head of 200 ft.

1 - 12" 4 Stage Pump
35 ft. of 8" Column *use 6" same*
1 - Surface Plate
1 - 50 H. P. Submersible Motor 3/60/220 Volt 1760 R. P. M.
Base Cable #1/0 plus 35 ft. of extra cable

Price - F. O. B. Factory, Freight Allowed to Woburn, Mass. - \$4400.00

We would be very glad to give you a sketch of a concrete block pump chamber for this unit. If you wish us to do so, please advise Mr. Maher.

You will require an 8" Gate Valve and an 8" Non-Slam Check Valve to be located in the pump chamber.

Any installation charges for this pump would be approximately one hundred and seventy-five dollars (\$175.00).

271 30 Col
11
12" 2 CKL-4 Stage

287
195
112

8" Gate - 127
8" Check 162
287
6" Gate 93
6" Check 75
192

000053

Commission
Sewerage Division
20 Somerset Street
Boston, Mass. 02108

Date Received _____

Application No. _____

Application for A Permit to Discharge Wastewater into
the Sewerage System of the Local Municipality and the Metropolitan
District Commission.

Instructions: Complete the following sections. Use extra
sheets if needed and label each supplemental
sheet by placing the Applicant's name at
the top of the page.

Part I

General Information

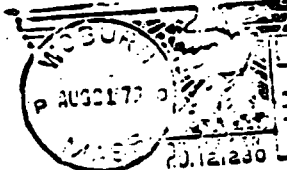
1. Date of Application August 21, 1979
2. Type of Application Existing discharge X Proposed discharge _____
3. Business Name of Applicant JOHN J. RILEY COMPANY
Address 228 Salem Street Woburn, Mass. Zip Code 01801
street, city or town
Tel. No. 028-5900
4. Name of Applicant's on-site representative in charge of wastewater disposal:
Name Edwin O. Kaine Title Tanner
Address _____ Zip Code _____
city or town

U.S. POSTAL SERVICE
CERTIFICATE OF MAILING

Received From:
John J. Riley Co.
228 Salem St
Woburn Mass 01801

One piece of ordinary mail addressed to:
Metropolitan Dist. Commission - Sewerage
20 Somerset St
Boston Mass. 02108

MAY BE USED FOR DOMESTIC AND INTERNATIONAL MAIL. DOES NOT PROVIDE
FOR INSURANCE - POSTMASTER



Signature _____
Title President

Address 228 Salem Street-Woburn, Mass. Zip Code 01801
street, city or town
Tel. No. 933-5900

6. Principal Products or Services

A) Indicate principal products or services

Cattle hide tanning

B) Indicate applicable SIC Codes (if known) 31-F01

C) Indicate average production or service levels per year

7. Type of operation: List materials and quantities used per year in manufacturing products or providing services listed in Item #6 above.

8. Number of Employees 115 Operating hours some 16 and
some 24 hrs. dai
Number of shifts mostly 1 but
some 2nd and some 3

9. Water Supply

A) Source (eg. public, public utility, well or surface) Private WELL
Supply

B) Volume per year (cubic feet or gallons) 320,000 Gal/day
2 of 70,400,000 gal/yr (based upon
220 day/yr)

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10. Water Usage

	<u>gallons/day</u>	<u>Discharge Location(check one)</u>	
		<u>Sanitary</u>	<u>Storm Drain or</u>
		<u>Sewer</u>	<u>Surface Water</u>
A) Sanitary Wastewater (domestic only)	_____	_____	_____
B) Process Wastewater	<u>280,000</u>	_____	_____
C) Water Incorporated in product	<u>NONE</u>	_____	_____
D) Uncontaminated Water (eg. cooling water)	<u>NONE</u>	_____	_____
E) Other (specify)	_____	_____	_____

11. Seasonal and batch type discharges. Describe duration, process rate or flow, quantity and disposal location of any seasonal or batch discharges.

Entire operation is composed of batch type sub-operations. The process flow, duration and quantity of these sub-operations is highly variable and dependent upon the type and quantity of product produced. All batch type discharges are combined before discharge through a common sewer.

12. Do you segregate wastewater from non process wastewater?

 Yes X No

If "yes", please describe:

13. How many discharge connections do you have to the municipal or MDC sewerage system, excluding storm drain connections? ONE
Describe by street name and assign a number to each connections:

<u>Connection No.</u>	<u>Street Name</u>	<u>Type(s) of wastewater discharging</u>
-----------------------	--------------------	--

14. For each connection to the sewerage system listed in Item 13., complete Part II and attach hereto.

On behalf of the applicant, I hereby apply for a permit to discharge the waste(s) described herein to the sewerage systems of the municipality and the Metropolitan District Commission. I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief the information submitted is true, complete and accurate.

In filing this application the applicant agrees to abide by the municipal sewer use ordinance or bylaw and the MDC Sewer Use Rules and Regulations adopted under Chapter 92 Massachusetts General Laws, Chapter 705 of the Acts of 1945 and applicable requirements of State and Federal Law.

Authorized Agent

Title

Applicant Name JOHN J. KELLEY COMPANY

Discharge Connection Number _____

Municipality's Name (eg. Boston) Woburn

Part II

Characteristics of Wastewater Discharges

Instructions: If you have only one connection with both process wastewater and sanitary wastewater combined, put information under process wastewater and indicate types of wastewater.*

1. Volume - gallons per day

	<u>Volume</u>	<u>No. of hours discharged</u>
A) Sanitary Wastewater (domestic only)		
i) Average daily	_____	_____
ii) Maximum hourly	_____	_____
iii) Maximum daily	_____	_____
B) Process Wastewater		
i) Average daily	<u>320,000 gal</u>	<u>15 hours</u>
ii) Maximum hourly	<u>45,000 gph</u>	
iii) Maximum daily	<u>340,000 gal</u>	
* iv) Types of wastewater, if applicable	_____	_____
C) Uncontaminated Water		
i) Average daily	_____	_____

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Applicant Name JOHN J. SILEY

Discharge Connection Number _____

Municipality's Name(eg.Boston) Toburn

	<u>Volume</u>	<u>No. of hours discharge</u>
ii) Maximum hourly	_____	_____
iii) Maximum daily	_____	_____
D) Other		
i) Average daily	_____	_____
ii) Maximum hourly	_____	_____
iii) Maximum daily	_____	_____

2. Characteristics of Wastewater

A) Sanitary (domestic) if available

BOD₅ _____ mg/l (milligrams per liter)

Total suspended solids _____ mg/l

B) Process Wastewater (Flow-weighted averages)

i) BOD₅ 1,800mg/l

Suspended Solids 3,100mg/l

Dissolved Solids 7,700mg/l

pH Average 10.8 Range 12.8-6.3

ii) Metals

	<u>Maximum daily</u> <u>in mg/l</u>	<u>Monthly average in</u> <u>mg/l</u>
--	--	--

Copper

Chromium(+6)

Applicant Name JOHN C. LE

Discharge Connection Number

Municipality's Name(eg.Boston) Boston

	<u>Maximum daily in mg/l</u>	<u>Monthly average in mg/l</u>
Chromium(+3)	<u>246</u>	<u>74</u>
Cadmium	<u>0.04</u>	<u><0.01</u>
Nickel	<u> </u>	<u> </u>
Zinc	<u> </u>	<u> </u>
Lead	<u>1.8</u>	<u><1.0</u>
Mercury	<u> </u>	<u> </u>
Others:	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>
iii) Non metals		
Arsenic	<u> </u>	<u> </u>
Cyanide	<u> </u>	<u> </u>
Chloride	<u> </u>	<u> </u>
Sulfate	<u> </u>	<u> </u>
Others:	<u> </u>	<u> </u>
<u>Sulfide</u>	<u>520</u>	<u>148</u>
<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>
iv) Hydrocarbons and Asbestos Compounds		
phenols	<u> </u>	<u> </u>

Applicant Name _____

Discharge Connection Number _____

Municipality's Name (eg. Boston) Colburn

	<u>Maximum daily in mg/l</u>	<u>Monthly average in mg/l</u>
benzene	_____	_____
esters	_____	_____
pesticides		
_____	_____	_____
_____	_____	_____
_____	_____	_____
herbicides		
_____	_____	_____
_____	_____	_____
_____	_____	_____
others:		
<u>Grease</u>	<u>11,600</u>	<u>2,840</u>
_____	_____	_____
_____	_____	_____

C) Other wastewater - If applicable, describe as in 2.B) above.

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Applicant Name JOHN J. DEAN

Discharge Connection Number _____

Municipality's Name (eg. Boston) Lebanon

3. Pretreatment

For wastewater discharges listed in Item 2. above, describe if applicable:

a) Pretreatment processes employed or used

A 50,000 gallon tank with a V-notch weir and freeboard is used to remove floating solids and grease.

b) Efficiency in pretreatment, eg. % removal

4. Water Reclamation, if applicable:

Describe in-plant water reuse and recycling.

METROPOLITAN DISTRICT COMMISSION
20 Somerset Street
Boston, Mass. 02108

**INDUSTRIAL USER
PERMIT APPLICATION**

FOR MDC USE ONLY											
Category 4 <input type="checkbox"/>	Other <input type="checkbox"/>										
Industry Number											
<table border="1"><tr><td></td><td>-</td><td></td><td>-</td><td></td><td>-</td><td></td><td>-</td><td></td><td>-</td></tr></table>			-		-		-		-		-
	-		-		-		-		-		
Reviewer's Initials	Date										

SECTION A - GENERAL INFORMATION

☒ existing discharge ☐ proposed discharge

1. Business Name of Applicant: Riley Leather Co., Inc.
2. Mailing Address: 228 Salem Street
Woburn, MA. Zip Code: 01801
3. Facility Address (if different than mailing address): _____

Zip Code: _____
4. Person to whom permit should be mailed. Name: Charles J. Sheehan Title: President
5. Person to contact concerning information provided herein. Name: Charles J. Sheehan
Title: President Telephone No.: (617) 933-5900

I have personally examined and am familiar with the information submitted in this document and attachments. Based upon my inquiry of those individuals immediately responsible for obtaining the information reported herein, I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and/or imprisonment.

Date

Signature of Official

(Seal if applicable)

SECTION B. - PRODUCT OR SERVICE INFORMATION

1. Indicate principal products manufactured and/or services rendered:

Little Hide Tanning

2. Indicate applicable Standard Industrial Classification (SIC) Code(s) for all processes (if known):

3116

METROPOLITAN DISTRICT COMMISSION
Industrial User Permit Application

Industry Name: Riley Leather Co., Inc.

Section B - Product/Service Information (Cont'd)

3. List raw materials.

Include all liquids which are used or stored in bulk or in containers which have a capacity of greater than 5 gallons:

Raw Material	Quantity Used Per Year	Raw Material	Quantity Used Per Year
<u>See attached list</u>			

SECTION C. - PLANT OPERATIONAL CHARACTERISTICS

1. Shift information: (a) number of shifts per work day: 1 ☐ 2 ☒ 3 ☐
(b) work days per week: 4 ☐ 5 ☒ 6 ☐ 7 ☐
(c) average number of employees per shift: 1st 95 2nd 5 3rd
(d) shift start times: 1st 6:00 2nd 3:30 3rd
2. Is operation subject to seasonal variation: ☐ yes ☒ no
(a) If yes, indicate months of peak operation:
3. Does operation shut down for vacation, maintenance, or other reasons? ☒ yes ☐ no
(a) If yes, indicate period when shutdown occurs: 2 week shutdown in summer
4. Are major processes: ☒ batch ☐ continuous
(a) Average number of batches per work day: thirty
5. Is a Spill Prevention Control and Countermeasure Plan prepared for the facility? ☒ yes ☐ no

SECTION D. - WATER CONSUMPTION

1. Check all that apply: ☐ MDC ☒ City/Town ☒ Private Well ☐ Surface Water
☐ Private Contract ☐ Other (specify):

METROPOLITAN DISTRICT COMMISSION
Industrial User Permit Application

Industry Name: Riley Leather Co., Inc.

Section D - Water Consumption (Cont'd)

2. List past twelve months water consumption from water bills:

(a) 1st 6 month period, 19____: For all of 1984

(b) 2nd 6 month period, 19____: 2,650,000 gallons

Units are in: ☐ gpd ☐ 100 cf ☐ cf ☐ other (specify): _____

(c) Volume from other sources: 368,000 gallons per day.

SECTION E. - SANITARY SEWER AND COMBINED SEWER CONNECTION INFORMATION:

1. List plant sewer connections (assign a sequential connection number to each sewer connection starting with No. 1). If more than 3, attach additional connection information on another sheet of 8½x11 paper):

Connection Number	Sewer Size (inches)	Descriptive Location of Sewer Connection or Discharge Point	Average Flow (gpd)
<u>1</u>	<u>15</u>	<u>North side of sedimentation tank</u>	<u>368,000</u>

2. Attach a scaled drawing of the industrial complex, if available, showing location of sewers referenced in E-1. Show location of possible sampling points for sewers and SIC process effluents. For reference and field orientation, buildings, streets, alleys, and other pertinent physical structures should be included.

METROPOLITAN DISTRICT COMMISSION
Industrial User Permit Application

Industry Name: Riley Leather Co., Inc.

SECTION F. - WASTEWATER INFORMATION

1. Quantities in the table below may be expressed in the following units: check the units you will use and complete the table below:

☒ gallons per day

☐ cubic feet per day

☐ per cent of total daily usage

Usage Type	Quantity	Pretreatment		Sanitary Sewer Connection Number*				Discharge Location		
								Storm Drain/ Surface Water	No Dis- charge	Other (Specify)
		Yes	No	1	2	3	Other			
Sanitary (domestic)	<u>N/A</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	
Process	<u>168,000</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	
Cooling Water/ Uncontaminated Water	<u>1,000</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Boiler	<u>Approx. 100</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	
In Product	<u>N/A</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	
Other (specify): _____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	

2. Seasonal, batch, and intermittent discharges. Check applicable boxes.

Type	Frequency (check one)				Quantity per Discharge (include units)	Pretreatment		Discharge to Connection Number*			
	Daily	Weekly	Monthly	Yearly		Yes	No	1	2	3	Other
Boiler Blowdown	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>Approx. 100</u> <u>GPD</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cooling System Blowdown	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Plant Washdown	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>3,000 GPD</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Equipment Washdown	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Spent Chemical Solutions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Backwash	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>300 GPY</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other (specify): _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

*Box numbers 1, 2, 3 correspond to connection numbers in Section E above. If more than 3 connections to sanitary sewer, enter the proper connection number in "other" column.

METROPOLITAN DISTRICT COMMISSION
Industrial User Permit Application

Industry Name: Riley Leather Co., Inc.

SECTION G. - PRETREATMENT

1. Is any form of pretreatment (see list below) practiced at this facility? ☒ Yes ☐ No

For all waste streams which are treated before discharge, check the appropriate boxes for types of pretreatment used at this facility:

- ☐ Oil Separation
- ☐ Grease Trap
- ☒ Sedimentation
- ☐ Filtration
- ☐ Chemical Addition
- ☐ Neutralization/pH adjustment
- ☐ Biological
- ☐ Equalization
- ☐ Silver Recovery
- ☐ Gasoline Trap
- ☐ Other (specify): _____

Provide any additional descriptive information:

This image shows a single sheet of white paper with horizontal black ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

METROPOLITAN DISTRICT COMMISSION
Industrial User Permit Application

Industry Name: Riley Leather Co., Inc.

SECTION H. - NON-DISCHARGED WASTES

1. Are any waste liquids or sludges removed from facility site? ☐ Yes ☒ No

If "yes", these may best be described and quantified as:

Type	Estimated Gallons/Year
<input type="checkbox"/> Waste Solvent	_____
<input type="checkbox"/> Waste Product	_____
<input type="checkbox"/> Oil	_____
<input type="checkbox"/> Grease	_____
<input type="checkbox"/> Pretreatment Sludge	_____
<input type="checkbox"/> Inks/Dyes	_____
<input type="checkbox"/> Thinner	_____
<input type="checkbox"/> Paints	_____
<input type="checkbox"/> Acids and Alkalies	_____
<input type="checkbox"/> Plating Wastes	_____
<input type="checkbox"/> Pesticides	_____
<input type="checkbox"/> Other (specify):	_____
_____	_____
_____	_____
_____	_____

2. Does your company remove the above wastes from the facility? ☐ Yes ☐ No ☐ N/A

If no, state the name(s) and address(es) of all waste haulers.

a. _____ _____ _____ _____ _____ Zip Code: _____ Permit No. (if applicable) _____	b. _____ _____ _____ _____ _____ Zip Code: _____ Permit No. (if applicable) _____
--	--

3. Are any sludges, liquids, etc. placed with trash for disposal? ☐ Yes ☐ No ☐ N/A

Describe: _____

METROPOLITAN DISTRICT COMMISSION
Industrial User Permit Application

Industry Name: Riley Leather Co., Inc.

SECTION I. - CHARACTERISTICS OF DISCHARGES

1. If any wastewater analyses have been performed on the wastewater discharges from your facilities attach a copy of the most recent data to this application. Be sure to include the date of the analysis, name of laboratory performing the analysis and location(s) from which sample(s) were taken (attach sketches, plans, etc. as necessary).
2. Please indicate by placing an "X" in the appropriate box by each listed chemical whether it is "Suspected to be Present", or "Known to be Present" in your manufacturing or service activity or generated as a byproduct. Some compounds are known by other names.

ITEM NO.	CHEMICAL COMPOUND	SUSPECTED PRESENT	KNOWN PRESENT
1.	ammonia	X	
2.	asbestos (fibrous)		
3.	cyanide (total)		
4.	antimony (total)		
5.	arsenic (total)		
6.	beryllium (total)		
7.	cadmium (total)	X	
8.	chromium (total)		X
9.	copper (total)		
10.	lead (total)	X	
11.	mercury (total)		
12.	nickel (total)		
13.	selenium (total)		
14.	silver (total)		
15.	thallium (total)		
16.	zinc (total)		
17.	acenaphthene		
18.	acenaphthylene		
19.	acrolein		
20.	acrylonitrile		
21.	aldrin		
22.	anthracene		
23.	benzene		
24.	benzidine		
25.	benzo (a) anthracene		
26.	benzo (a) pyrene		
27.	benzo (b) fluoranthene		
28.	benzo (g,h,i) perylene		
29.	benzo (k) fluoranthene		
30.	a-BHC (alpha)		
31.	b-BHC (beta)		
32.	d-BHC (delta)		
33.	g-BHC* (gamma)		
34.	bis (2-chloroethyl) ether		
35.	bis (2-chloroethoxy) methane		
36.	bis (2-chloroisopropyl) ether		
37.	bis (chloromethyl) ether		

ITEM NO.	CHEMICAL COMPOUND	SUSPECTED PRESENT	KNOWN PRESENT
38.	bis (2-ethylhexyl) phthalate		
39.	bromodichloromethane		
40.	bromoform		
41.	bromomethane		
42.	4-bromophenylphenyl ether		
43.	butylbenzyl phthalate		X
44.	carbon tetrachloride		
45.	chlordanes		
46.	4-chloro-3-methylphenol		
47.	chlorobenzene		
48.	chloroethane		
49.	2-chloroethylvinyl ether		
50.	chloroform		
51.	chloromethane		
52.	2-chloronaphthalene		
53.	2-chlorophenol		
54.	4-chlorophenylphenyl ether		
55.	chrysene		
56.	4,4' - DDD		
57.	4,4' - DDE		
58.	4,4' - DDT		
59.	dibenzo (a,h) anthracene		
60.	dibromochloromethane		
61.	1, 2-dichlorobenzene		X
62.	1, 3-dichlorobenzene		
63.	1, 4-dichlorobenzene		
64.	3, 3'-dichlorobenzidine		
65.	dichlorodifluoromethane		
66.	1, 1-dichloroethane		
67.	1, 2-dichloroethane		
68.	1, 1-dichloroethene		
69.	trans-1, 2-dichloroethene		X
70.	2, 4-dichlorophenol		
71.	1, 2-dichloropropane		
72.	(cis & trans) 1, 3-dichloro-propene		
73.	dieldrin		
74.	diethyl phthalate		
75.	2, 4-dimethylphenol		

METROPOLITAN DISTRICT COMMISSION
Industrial User Permit Application

Industry Name: Riley Leather Co., Inc.

Section I. - Characteristics of Discharges (Cont'd)

Chemical Compound Table (Cont'd):

ITEM NO.	CHEMICAL COMPOUND	SUSPECTED PRESENT	KNOWN PRESENT
76.	dimethyl phthalate		
77.	di-n-butyl phthalate		
78.	di-n-octyl phthalate		
79.	4, 6-dinitro-2-methylphenol		
80.	2, 4-dinitrophenol		
81.	2, 4-dinitrotoluene		
82.	2, 6-dinitrotoluene		
83.	1, 2-diphenylhydrazine		
84.	endosulfan I		
85.	endosulfan II		
86.	endosulfan sulfate		
87.	endrin		
88.	endrin aldehyde		
89.	ethylbenzene	X	
90.	fluoranthene		
91.	fluorene		
92.	heptachlor		
93.	heptachlor epoxide		
94.	hexachlorobenzene		
95.	hexachlorobutadiene		
96.	hexachlorocyclopenta-diene		
97.	hexachloroethane		
98.	indeno (1,2,3-cd) pyrene		
99.	isophorone		
100.	methylene chloride		
101.	naphthalene		X
102.	nitrobenzene		
103.	2-nitrophenol		

ITEM NO.	CHEMICAL COMPOUND	SUSPECTED PRESENT	KNOWN PRESENT
104.	4-nitrophenol		
105.	n-nitrosodimethylamine		
106.	n-nitrosodiphenylamine		
107.	n-nitrosodiphenylamine		
108.	PCB-1016		
109.	PCB-1221		
110.	PCB-1232		
111.	PCB-1242		
112.	PCB-1248		
113.	PCB-1254		
114.	PCB-1260		
115.	pentachlorophenol		
116.	phenanthrene		
117.	phenol	X	
118.	pyrene		
119.	2,3,7,8-tetrachlorodi-benzo-p-dioxin		
120.	1,1,2,2-tetrachloroethane		
121.	tetrachloroethene		X
122.	toluene	X	
123.	toxaphene		
124.	1,2,4-trichlorobenzene		
125.	1,1,1-trichloroethane		
126.	1,1,2-trichloroethane		
127.	trichloroethane		X
128.	trichlorofluoromethane		
129.	2,4,6-trichlorophenol		
130.	vinyl chloride		

3. Please list and provide the average concentration in discharged wastewater. If concentration is not known indicate by "--" (attach additional sheets if needed). Include all chemical compounds "Known Present" in the previous section.

ITEM NO.	CHEMICAL COMPOUND	ANNUAL USAGE (LBS)	DISCHARGE CONCENTRATION PPM	ITEM NO.	CHEMICAL COMPOUND	ANNUAL USAGE (LBS)	DISCHARGE CONCENTRATION PPM
	BOD ₅		1628	61	1,2-dichlorobenzene		0.013
	Total Suspended Solids		2087	69	trans-1,2-dichloroethane		0.010
	Settleable Solids		" "				
	Dissolved Solids		6390	101	naphthalene		0.006
	pH 4.7-10.7			121	tetrachloroethene		0.020
	Chromium		54	127	tetrachloroethene		0.030
43	Butylbenzyl phthalate		0.007				

METROPOLITAN DISTRICT COMMISSION
Industrial User Permit Application

---Attached List---

Section B: Part 3 -- List Raw Materials (Liquids greater than 5 gals)

<u>Raw Material</u>	<u>Quantity Used Per Year</u>
Molasses	165,880 lbs.
Sodium Bichromate (6%)	862,970 lbs.
Sulfuric Acid	1,112,000 lbs.
Formic Acid	7,200 lbs.
Acetic Acid	180 lbs.
Sodium Tetrasulfide	39,600 lbs.
TrisButoxyethyl Phosphate	1,840 lbs.
Caustic Potash	40 gals.
Butyl Acetate	1,320 gals.
Butyl Cellosolve	660 gals.
Diisobutyl Ketone	2,420 gals.
Tan Room Proprietary Chemicals (total)	22,370 gals.
Color Room Proprietary Chemicals (total)	61,830 gals.
Finish Room Proprietary Chemicals (total)	51,430 gals.

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